

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application: **(AS ON AMENDED SHEET(S) ANNEXED TO IPRP)**

Claims 1-84 have been cancelled, without prejudice.

86. (New) Device for positioning a tool in relation to an object to be processed, comprising a toolholder element suitable for bearing said tool and movable along a registration direction in which said tool is moved towards and away from said object, an adjustable member movable transversely of said registration direction so as to be operationally associatable with said toolholder element and an abutting member suitable for tightening said toolholder element against said adjustable member, said toolholder element being interposed between said abutting member and said adjustable member along said registration direction.
87. (New) Device according to claim 86, wherein said adjustable member comprises a block actuated to slide in a sliding direction by an adjusting arrangement and provided with a tilted face suitable for interacting with a correspondingly tilted active surface of said toolholder element.
88. (New) Device according to claim 87, wherein said abutting member translates said toolholder element in said registration direction which is transverse in relation to said sliding direction.

89. (New) Device according to claim 87, wherein said abutting member comprises a further tilted face suitable for interacting with a further correspondingly tilted active surface, opposite said active surface, of said toolholder element.
90. (New) Device according to claim 87, wherein said adjusting arrangement comprises a micrometric screw member rotatably coupled with said block.
91. (New) Device according to claim 87, wherein said block comprises an abutting surface sliding on a frame arrangement of said apparatus.
92. (New) Device according to claim 86, wherein said abutting member comprises a further abutting surface sliding on a frame arrangement of said apparatus.
93. (New) Device according to claim 86, and furthermore comprising an actuating device arranged to transfer said abutting member between a work position, wherein said abutting member interacts with said toolholder element, and a rest position, wherein said abutting member does not interact with said toolholder element.
94. (New) Device according to claim 93, and furthermore comprising a further actuating device arranged to move said toolholder element, when said abutting member is in said rest position.
95. (New) Device for positioning a tool in relation to an object to be processed, comprising a toolholder element suitable for bearing said tool and an adjustable member operationally associatable with said toolholder element, wherein an

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abutting member is furthermore comprised, said abutting member being suitable for tightening said toolholder element against said adjustable member.

96. (New) Device according to claim 95, wherein said adjustable member comprises an abutting element associatable with a block integral with a frame of said apparatus.
97. (New) Device according to claim 96, wherein the distance between an active zone of said abutting element and said block is adjustable.
98. (New) Device according to claim 97, wherein between said active zone and said block a spacer is removably interposed.
99. (New) Device according to claim 98, wherein said spacer belongs to a group of spacers, the spacers of said group of spacers having different thicknesses from one another.
100. (New) Device according to claim 98, wherein said abutting element comprises a head of a screw provided with a stem screwable in a hole obtained in said block.
101. (New) Device according to claim 100, wherein said spacer is provided with a passage for said stem.
102. (New) Device according to claim 96, wherein said abutting element is shaped in such a way as to receive resting thereupon a portion of said toolholder element, when said toolholder element is in an advanced work position.
103. (New) Device according to claim 102, and furthermore comprising a stopping element shaped in such a way as to receive resting thereupon a further portion

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of said toolholder element, when said toolholder element is in a retracted rest position.

104. (New) Device according to claim 103, wherein said stopping element is fixed to said block.

105. (New) Device according to claim 102, wherein said abutting member comprises a tooth element movable between a locking configuration, wherein said tooth element prevents said toolholder element from moving in relation to said frame, and a release configuration, wherein said tooth element allows said toolholder element to move in relation to said frame.

106. (New) Device according to claim 105, wherein said tooth element is rotationally supported on said frame.

107. (New) Device according to claim 105, wherein, in said locking configuration, said tooth element interacts with a part of said toolholder element to keep said toolholder element in said advanced work position.

108. (New) Device according to claim 107, wherein said part comprises a further abutting element projecting from a side face of said toolholder element.

109. (New) Device according to claim 108, wherein said further abutting element comprises a further head of a further screw provided with a further stem suitable for engaging in a hole obtained in said toolholder element.

110. (New) Device according to claim 103, wherein said toolholder element comprises a plate sliding along a guide fixed to said frame.

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111. (New) Device according to claim 110, wherein said plate is provided with an opening inside which said abutting element is positioned.
112. (New) Device according to claim 111, wherein said opening comprises a first edge zone, more distant from said tool, and a second edge zone, nearer said tool.
113. (New) Device according to claim 112, wherein said portion is obtained in said first edge zone.
114. (New) Device according to claim 113, wherein said portion comprises a yet further abutting element extending towards the inside of said opening.
115. (New) Device according to claim 114, wherein said yet further abutting element comprises a yet further head of a yet further screw provided with a yet further stem suitable for engaging in a yet further hole obtained in said plate.
116. (New) Device according to claim 112, wherein said further portion is obtained in said second edge zone.
117. (New) Device according to claim 86, and furthermore comprising a monitoring device arranged to monitor said tool.
118. (New) Device according to claim 117, wherein said monitoring device comprises a camera.
119. (New) Device according to claim 117, wherein said monitoring device comprises a position sensor arranged to detect the position of said tool.

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120. (New) Device according claim 86, and furthermore comprising a detecting arrangement arranged to detect characteristics of said object.
121. (New) Device according to claim 120, wherein said detecting arrangement comprises a temperature sensor arranged to detect the temperature of said object.
122. (New) Device according to claim 120, wherein said detecting arrangement comprises a colour sensor device arranged to detect the colour of said object.
123. (New) Device according to claim 86, wherein said tool comprises an etching knife of an apparatus for the production of caps.
124. (New) Apparatus for the production of caps, comprising a first operating turntable device associated with a first operating arrangement and a further operating turntable device associated with a further operating arrangement, wherein between said first operating turntable device and said further operating turntable device is interposed a transferring turntable device such as to transfer said caps between said first operating turntable device and said further operating turntable device.
125. (New) Apparatus according to claim 124, wherein said first operating arrangement comprises a folding arrangement arranged to fold a fixing promoting arrangement with which said caps are provided.

126. (New) Apparatus according to claim 124, wherein said further operating arrangement comprises a cutting arrangement arranged to make a nominal cutting line in a parallel wall of said caps.
127. (New) Apparatus according to claim 124, and furthermore comprising a further transfer turntable device such as to pick up said caps from said further operating turntable device.
128. (New) Apparatus for the production of caps, comprising a first operating turntable device associated with a first operating arrangement and a further operating turntable device associated with a further operating arrangement, wherein between said first operating arrangement and said further operating arrangement a monitoring device is interposed arranged to monitor said caps.
129. (New) Apparatus according to claim 128, wherein said first operating arrangement comprises a folding arrangement arranged to fold a fixing promoting arrangement with which said caps are equipped.
130. (New) Apparatus according to claim 128, wherein said further operating arrangement comprises a cutting arrangement arranged to make a nominal cutting line in a side wall of said caps.
131. (New) Apparatus according to claim 128, wherein said monitoring device comprises a camera.
132. (New) Apparatus according to claim 128, and furthermore comprising, downstream of said monitoring device, an evacuation device suitable for

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evacuating caps that have been deemed not to conform to a preset quality standard by said monitoring device.

133. (New) Apparatus for the production of caps, comprising a chamber isolated from an external environment and arranged to receive said caps to enable said caps to be subjected to controlled treatments.

134. (New) Apparatus according to claim 133, wherein with said chamber an adjusting arrangement is associated arranged to adjust the temperature inside said chamber.

135. (New) Apparatus according to claim 133, wherein with said chamber an irradiating arrangement is associated arranged to irradiate said caps.

136. (New) Apparatus according to claim 133, wherein with said chamber a cleaning arrangement is associated arranged to clean said caps.

137. (New) Apparatus according to claim 133, wherein said chamber is associated with a turntable device arranged to transfer said caps.

138. (New) Apparatus according to claim 137, wherein said turntable device comprises a transferring turntable device arranged to transfer said caps from a first operating turntable device of said apparatus to a second operating turntable device of said apparatus.

139. (New) Apparatus according to claim 138, wherein with said first operating turntable device a folding arrangement is associated arranged to fold a fixing promoting arrangement with which said caps are provided.

140. (New) Apparatus according to claim 138, wherein with said second operating turntable device a cutting arrangement is associated arranged to make a nominal cutting line in a side wall of said caps.
141. (New) Apparatus according to claim 137, wherein said turntable device comprises a transfer turntable device arranged to pick up said caps from an operating turntable device of said apparatus and evacuate said caps from said apparatus.
142. (New) Apparatus for the production of caps, comprising a cutting arrangement arranged to make on said caps a nominal cutting line, wherein a sensing arrangement is comprised, said sensing arrangement being operationally associated with said cutting arrangement in such a way as to monitor the positioning of said cutting arrangement in relation to said caps.
143. (New) Apparatus according to claim 142, wherein said sensing arrangement comprises a position sensor arranged to detect thermal dilations of an etching knife of said cutting arrangement.
144. (New) Apparatus according to claim 142, wherein said sensing arrangement comprises a temperature sensor arranged to detect the temperature of said caps.
145. (New) Apparatus according to claim 142, wherein said sensing arrangement comprises a colour sensor arranged to detect the colour of said caps.
146. (New) Apparatus for the production of caps, comprising a folding arrangement for folding a fixing promoting arrangement inside said caps, wherein said folding

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arrangement comprises an articulated folding device provided with an operating zone movable between an inactive position, wherein said operating zone is positioned outside said caps, and a work position, wherein said operating zone is received inside said caps to fold said fixing promoting arrangement inside said caps.

147. (New) Apparatus according to claim 146, wherein said articulated folding device comprises a rocker arm provided with an end at which said operating zone is obtained.
148. (New) Apparatus according to claim 147, wherein said operating zone comprises a roller rotationally supported on said end.
149. (New) Apparatus according to claim 147, wherein said rocker arm comprises a further end cooperating with a rod.
150. (New) Apparatus according to claim 146, wherein said articulated folding device is associated with a seat arranged to receive said caps.
151. (New) Apparatus according to claim 150, wherein said seat is comprised in a plurality of seats, which are arranged substantially angularly spaced at an equal distance from one another on a turntable device.
152. (New) Apparatus according to claim 150, and furthermore comprising lifting organs suitable for translating said caps from a bottom supply position to an intermediate position inside said seat.

153. (New) Apparatus according to claim 152, wherein said lifting organs transfer said caps from said intermediate position to a top position wherein said folding arrangement takes on said work position.
154. (New) Apparatus according to claim 152, wherein said articulated folding device is assembled on an element actuated to run along a body of said apparatus by said lifting organs.
155. (New) Apparatus for the production of caps, comprising a folding arrangement arranged to fold a fixing promoting arrangement with which said caps are provided and a cutting arrangement arranged to make a nominal cutting line in a side wall of said caps, wherein said cutting arrangement is coaxial to said folding arrangement and is arranged outside said folding arrangement.
156. (New) Apparatus according to claim 155, wherein outside a spindle body of said cutting arrangement there is provided a collar of said folding arrangement.
157. (New) Apparatus according to claim 124 and/or according to claim 128 and/or according to claim 133 and/or according to claim 142 and/or according to claim 146 and/or according to claim 155.
158. (New) Apparatus according to claim 124, and comprising a device according to claim 86.
159. (New) Apparatus according to claim 124, and furthermore comprising a pressurized air recovery device.

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160. (New) Apparatus according to claim 159, wherein said pressurized air recovery device is connected to a suction device associated with a cutting arrangement of the apparatus and arranged to pick up flashing arising from the interaction between said cutting arrangement and said caps.
161. (New) Apparatus according to claim 160, wherein said pressurized air recovery device is connected to a further suction device associated with a further cutting arrangement arranged to remove appendages of respective casting feedheads from said caps.
162. (New) Apparatus according to claim 161, wherein said pressurized air recovery device comprises a conduit cooperating with a filter arranged to withhold said flashing.
163. (New) Apparatus according to claim 162, wherein said pressurized air recovery device comprises a further conduit cooperating with a further filter arranged to withhold said appendages.
164. (New) Apparatus according to claim 163, wherein said conduit and said further conduit flow into a manifold.
165. (New) Apparatus according to claim 164, wherein a fan is associated with said manifold.
166. (New) Apparatus according to claim 165, wherein said manifold supplies a pneumatic conveying device arranged to transfer said caps to an operating turntable device of said apparatus.

167. (New) Apparatus according to claim 124, and furthermore comprising a heating device arranged to heat an operating arrangement of said apparatus.
168. (New) Apparatus according to claim 167, and furthermore comprising a rotating electric commutator arranged to connect said operating arrangement to an electric current supplying device associated with a frame of said apparatus.
169. (New) Apparatus according to claim 168, wherein said operating arrangement is movable in relation to said frame.
170. (New) Apparatus according to claim 167, wherein said operating arrangement comprises a folding arrangement arranged to fold a fixing promoting arrangement with which said caps are provided.